

Short Answer:

Answer the following questions with complete sentences in your own words. You are encouraged to conduct your own research online or through other methods before answering the questions. If you research online, please consult multiple sources before you write down your answers. You are expected to be able to explain your answers in detail (Provide examples for each question).

1. What is NuGet?
2. What is ADO.NET, and what are the major components it provides?
3. What is DataSet in ADO.NET?
4. What are Data Providers in ADO.NET?
5. What are the steps of database handling via ADO.NET?
6. What is connection pooling, and how can we enable or disable connection pooling in the application?
7. What's the purpose of the using() statement?
8. What are the different execute() methods available in ADO.NET?
9. What are the differences between DataReader and DataAdapter. Which one would you prefer to use?
10. How to invoke stored procedures via ADO.NET?
11. What is a transaction in ADO.NET?
12. Explain ACID Properties.
13. What is Connected Architecture, and what is Disconnected Architecture?

Coding Questions:

Write code in c# to solve the following problems. Please write your own answers. You are highly encouraged to present more than one way to answer the questions. Please follow best practices when you write the code so that it is easily readable, maintainable, and efficient. Clearly state your assumptions if you have any. You may discuss with others on the questions, but please write your own code.

There is a pizza shop in East Windsor that requires some CRUD operations to be implemented using ADO.NET(try to use both DataReader and DataAdapter to implement the functions below);

1. Create a Pizza on the menu
2. Read all Pizzas from the shop
3. Read a Pizza given its unique Id
4. Update a Pizza given its unique Id
5. Delete a Pizza by its unique Id
6. Create an UD-Stored Procedure called "The Signiture Menu" to get TOP3 expensive Pizzas and execute the SP using your .NET application

The domain of pizza has the following properties:

```
int Id {get; set;}  
string Name {get; set;}  
float Price {get; set;}
```

A SQL script has been provided for this assignment. Please run the script and base your implementation on it.